



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/639,432	08/14/2000	Vladimir Kljajic	TI-29645	1222

7590 03/25/2004

J Dennis Moore
Texas Instruments Incorporated
P O Box 655272 M/S 3999
Dallas, TX 75265

EXAMINER

MUNOZ, GUILLERMO

ART UNIT	PAPER NUMBER
----------	--------------

2634

DATE MAILED: 03/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/639,432

Applicant(s)

KLJAJIC ET AL.

Examiner

Guillermo Munoz

Art Unit

2634

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 August 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 12, 13, 16 and 20-30 is/are rejected.
- 7) ☒ Claim(s) 4-11, 14, 15 and 17-19 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 2, and 3 are rejected under 35 U.S.C. 102(e) as being anticipated by 6,366,610.

Regarding claim 1, Loyer et al. disclose Autobaoding With Adjustment To A Programmable Baud Rate which teaches all the claimed subject matter “selecting a desired baud rate...pair of adjacent pulses thereof” in claim 1 as follows: selecting a desired baud rate is anticipated by step 504 and 506 of figure 6;

providing a composite divisor is anticipated by elements 302 and 304 of figure 3;

the minimum time interval is inherent to the highest possible baud rate;

at least one pair of adjacent pulses is anticipated by the baud divisor replacement taking place immediately following the start bit and before the next byte of data is received, note Col. 2, lines 37-39;

extended time interval is anticipated by any baud rate less than the highest possible baud rate;

dividing the base clock signal in response to said composite divisor is anticipated by element 302 of figure 3;

baud clock signal has a baud rate that approximates the desired baud rate is anticipated by baud clock output 203 of figure 3;

within each symbol interval...the extended time interval between the leading edges of at least one pair of adjacent pulses thereof is anticipated by the time between leading edges of a pair of adjacent pulses from a baud rate less than the highest possible baud rate, therefore any such baud rate would inherently have at least the minimum time interval between leading edges of a pair of adjacent pulses.

Regarding claim 2, Loyer et al. further teach the claimed subject matter "providing an oversampling factor...the desired baud rate" with element 304 of figure 3, note Col. 5, lines 16-17.

Regarding claim 3, Loyer et al. further teach the claimed subject matter "first divisor...second divisor" with elements 304 and 302, respectively, of figure 3.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 12,13,16, and 20-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Loyer et al. in view of Hongbin Hao et al..

Art Unit: 2634

Regarding claim 12, as applied to claim 1, Loyer et al. disclose Autobaoding With Adjustment To A Programmable Baud Rate which teach almost all the claimed subject matter “data processing circuitry...one pair of adjacent pulses thereof” in claim 21 as follows: generating an initial divisor based on an autobauding procedure; the procedure includes a comparing and updating period, wherein the generated divisor is compared to a select group of programmed divisor ranges stored in registers for the purpose of optimizing the divisor selection process. Loyer et al. further teach that the method of generating said divisor is not critical to the invention, but that the autobaud divisor is based on the size of a start bit, however, Loyer et al. does not disclose how the size of a start bit is used in generating the baud clock.

Hongbin Hao et al. teach a method of generating divisor values based on the length of a start bit for the purpose of determining if the period of the start bit falls within any of a set of predetermined bit time ranges. The method includes an apparatus for generating a baud clock having a clock input and a digital data stream input for generating samples fed into a baud rate determination unit, note figure 4.

Therefore, it would have been obvious to one having ordinary skill in the art to characterize the divisor generating method of Loyer et al. with the teaching of Hongbin Hao et al., since Loyer et al. indicates in Col. 5, line 20 the method of generating the divisor is optional.

Regarding claim 13, see claim 3.

Regarding claim 16; as applied to claim 12, Hongbin Hao et al. further teach the claimed subject matter “includes a look-up table....second divisor components” in element 42 of figure 4.

Regarding claim 20, Loyer et al. further teach the claimed subject matter "UART", note Col. 1, line 20.

Regarding claim 21; as applied to claim 12, Loyer et al. disclose a Autobauding With Adjustment To A Programmable Baud Rate which teach all the claimed subject matter "data processing circuitry...one pair of adjacent pulses thereof" in claim 21 as follows: base clock is anticipated by the UCLK of figure 3.

Regarding claim 22, see claim 20.

Regarding claim 23, Loyer et al. further teach the claimed subject matter "one of ...radiotelephone" in Col. 1, lines 5-19.

Regarding claim 24, see claim 21.

Regarding claim 25, see claim 23.

Regarding claim 26, Loyer et al. teach the nature of the device used in connection with the UART in not critical to the invention, note Col. 4, lines 22-24. Therefore, to have the external device be one of a microprocessor, a digital signal processor, a modem, a keyboard, a mouse, a printer and a laptop or desktop computer would have been routine experimentation and optimization in the absence of criticality.

Regarding claim 27, see claim 26.

Regarding claim 28, see claim 21.

Regarding claim 29, Loyer et al. further teach the claimed subject matter "providing...start bit of the incoming data" in Col. 5, lines 35.

Regarding claim 30, see claim 21.

Art Unit: 2634

Claim Objections

Claims 4-11, 14, 15, and 17-19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Guillermo Munoz whose telephone number is 703-305-4224. The examiner can normally be reached on Monday-Friday 8:30a.m-4:30p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Chin can be reached on 703-305-4714. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



GM
March 9, 2004



STEPHEN CHIN
SUPERVISORY PATENT EXAMINEE
TECHNOLOGY CENTER 2800